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EXAMINER

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ART UNIT

PAPER NUMBER

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2611  
DATE MAILED:

11/02/94

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

15

This application has been examined  Responsive to communication filed on 08-10-94  This action is made final.

A shortened statutory period for response to this action is set to expire 63 month(s), days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- Notice of References Cited by Examiner, PTO-892.
- Notice of Draftsman's Patent Drawing Review, PTO-948.
- Notice of Art Cited by Applicant, PTO-1449.
- Notice of Informal Patent Application, PTO-152.
- Information on How to Effect Drawing Changes, PTO-1474..
- \_\_\_\_\_

**Part II SUMMARY OF ACTION**

1.  Claims 1-15 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 1-15 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).

12.  Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

**EXAMINER'S ACTION**

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I. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

II. Claims 7-9, 14-15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Blakeney, II et al (hereinafter simply referred to as Blakeney).

As to claim 7, Blakeney discloses a cellular telephone system comprising steps of "decoding at the mobile station" (see column 13, lines 35-65; column 27, lines 11-47), "transmitting a signal from said mobile station the signal strength indications" (see column 4, lines 1-14; column 27, lines 15-39), "receiving the signal strength indications at one of the base stations" (see column 4, lines 5-10), "processing the indicated signal strengths at the network controller" (see column 14, lines 10-14).

As to claims 8, 15, with respect to an "access code", see Blakeney, column 26, lines 59-66.

As to claims 9, 15, with respect to "base station code", and "traffic channel code", see Blakeney, column 19, lines 24-42.

As to claim 14, see Blakeney, figure 1, numerals 12, 14, 16 for "first and second base stations"; numeral 18 for "remote

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unit". See figure 2, numeral 34 for "signal processing means"; numeral 34 for "analog to digital conversion means" (also see column 12, lines 61-63); numerals 46, 40, 42 for "CDMA processing means"; numerals 50, 52 for "encoder means"; numerals 38, 36, 30 for "CDMA transmitting means".

III. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

IV. Claims 1-6, 10-13 are rejected under 35 U.S.C. § 103 as being unpatentable over Blakeney.

Blakeney discloses a soft handoff apparatus and method comprising limitations of "first and second base stations" (see base stations A and B of figures 8-9); "mobile station" 18 (figure 1); "network controller" 10 (figure 1); "first frequency"

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(see column 6, lines 6-8), "first code and second code" (see column 6, lines 17-20 for different code phase offsets, see also column 19, lines 25-35); "demodulated first and second signals" (see blocks 42-40 of figure 2, column 13, lines 35-65; column 27, lines 11-12); "signal processing means" 46 (figure 2); "CDMA processing means" 46 (figure 2), "first and traffic signals" (see column lines 23-35), "control message" (see column 19 for hand-off direction message, in-traffic message).

As to claims 1, 2, 10, Blakeney fails to disclose that the second base station" receives the transfer indication from the first base station (instead, the above transfer indication is generated from the "network controller" in Blakeney's reference as recited on column 3, lines 62-68). However, those skilled in the art would have appreciated that in Blakeney's reference the second base station could receive the transfer indication from either the first base station or network controller. In addition, if the transfer indication is transmitted from the base station instead of network controller, less work is going to be done at the network controller. Therefore, it would have been obvious to one of ordinary skill in the art to modify Blakeney reference as recited in the claim, because it would reduce the cost of implementing the network controller.

As to claim 2, Blakeney fails to disclose that the first and second base stations employ different carrier frequencies.

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However, it would be appreciated by those skilled in the art that if a minimum frequency bandwidth or a non-interrupted handoff is preferred in Blakeney's invention, then the first and second base stations should use the same carrier frequency. Otherwise, if a minimum frequency interference is preferred or one of the two base stations can not provide signals for the mobile station on the frequency employed by another base station, then the different carrier frequencies should be incorporated. Therefore, it would have been obvious to one of ordinary skill to modify Blakeney's reference as recited in the claim, because the frequency interference would be greatly reduced.

As to claim 3, with respect a "first base station code", a "first access code", a "second base station code" and a "second access code", see Blakeney, column 6, lines 23-27; column 19, lines 24-27.

As to claims 11-13, with respect to a "traffic channel code", see Blakeney, column 19, lines 3-10, 31-35, 60-64.

As to claims 4-6, Blakeney discloses limitations of "error correcting the demodulation signals" (see column 13, lines 62-65, "diversity combination" (see column 13, lines 54-65).

V. Applicant's arguments filed 08-10-94 have been fully considered but they are not deemed to be persuasive.

According to Applicant's remarks, Applicant argues that in

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Blakeney's reference, signals transmitted from a plurality of base stations use the same code, instead of different codes as shown in the claimed invention. With that reason, Applicant goes to conclusion that pending claims 1-15 are patentable over Blakeney.

The Examiner, however, disagrees with Applicant's position. Applicant's attention is directed to Blakeney, column 6, lines 17-34, which states that the pilot signal as transmitted by each base station is of the same PN spreading code but with a different code phase offset. It is this phase offset which allows the pilot signals to be distinguished from one another by the mobile station, resulting in a differentiation between base stations from which they originate. Since the pilot signals transmitted from the plurality of base stations have to be distinguished from one another by the mobile station, the Examiner takes position that the code used by each base station would be a combination of the same PN spreading code and the code phase offset associated with each base station. With that in mind, it is obvious that in Blakeney one base station employs a different code from other base stations. In addition, Applicant's attention is directed to the claimed invention of claims 1-15, wherein it merely recites "a first code", "a second code which is different from said first code". Specifically, the claimed invention fails to clearly show "the components" of the

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code. For that reason, the Examiner contends that the claimed invention is broadly enough to be read by Blakeney.

**VI. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

**VII.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Vo whose telephone number is (703) 308-6728.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Nguyen Vo NV

October 29, 1994

*R. Eisenzopf*  
Reinhard J. Eisenzopf 10-30-94  
Supervisory Patent Examiner  
Group 260